

iDS-2CD7046G0-AP

4 MP Box Network Camera

DarkFighter™



- 4 MP Resolution
- DarkFighter Technology for Excellent Low-Light Performance
- 140 dB WDR
- H.265+ Compression
- Smooth Live View and Data Self-Correcting
- 5 Streams + Up to 5 Custom Streams
- Built-In Microphone

Attribute-Based People Counting

Embedded deep learning algorithms integrate multiple intelligences. They count people, sample face features, and identify people who pass repeatedly over a period of time. They count persons and send a face alarm for entrance control and people counting.

Hard Hat Detection

Embedded deep learning algorithms detect persons in a specified region. They detect if the person is wearing a hard hat and captures the person's head and sends an alarm if not.

Multi-Target Detection

Embedded deep learning algorithms detect and capture the face and human body in specified regions and outputs features such as gender, age, and top color. It supports a structured modeling of the face and human body to achieve structured data collection.

Queue Management

Embedded deep learning based algorithms detect queued people number and waiting times. The body feature detection algorithm filters out wrong targets and increases detection accuracy.

Metadata

Metadata uses individual application data instances or the data content. Metadata can be used for third-party application development.

Smooth Streaming

Smooth streaming improves video quality in different network conditions. For example, in poor network conditions, adapting to the detected real-time network condition, streaming bit rate and resolution are automatically adjusted to avoid mosaic and lower latency in live view; in multiplayer network conditions, the camera transmits redundant data for self-error correcting in back-end device to solve mosaic problems because of packet loss and error rate.

Available Models

iDS-2CD7046G0-AP



Specifications

IDS-2CD7046G0-AP	
Camera	
Image Sensor	1/1.8" progressive scan CMOS
Minimum Illumination*	Color: 0.001 lux @ (f/1.2, AGC on); B/W: 0.0003 lux @ (f/1.2, AGC on) * These are reference values based on a lens with an f/1.2 aperture; actual values will depend on the lens used
Shutter Speed	1 s to 1/100,000 s
Slow Shutter	Yes
P/N	P/N3
Wide Dynamic Range	140 dB
Day/Night	IR cut filter
Flash Memory	8 GB
RAM	2 GB
Lens	
Lens Mount	DC drive, CS mount
Lens	Not included
ABF	Supported (based on lens used)
P-Iris	Supported (based on lens used)
Video	
Maximum Resolution	2680 × 1520
Main Stream	50 Hz: 25 fps (2680 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 60 fps (2680 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)
Sub-Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)
Third Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
Fourth Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
Fifth Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)
Custom Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
Video Compression	Main stream: H.265+/H.265/H.264+/H.264 Sub-stream/third stream/fourth stream/fifth stream/custom stream: H.265/H.264/MJPEG
Video Bit Rate	32 Kbps to 16 Mbps
H.264 Type	Baseline Profile/Main Profile/High Profile
H.265 Type	Main Profile
H.264+	Main stream supports
H.265+	Main stream supports
Bit Rate Control	CBR/VBR
Stream Type	Main stream/sub-stream/third stream/fourth stream/fifth stream/custom stream
Scalable Video Coding (SVC)	H.265 and H.264 support
Region of Interest (ROI)	4 fixed regions for each stream
Audio	
Environment Noise Filtering	Yes
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3
Audio Bit Rate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32–192 Kbps (MP2L2)/32 Kbps (PCM)/8–320 Kbps (MP3)
Audio Type	Mono sound
Network	
Simultaneous Live View	Up to 20 channels
API	Open Network Video Interface (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, ISUP
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1x, QoS, IPv6, UDP, Bonjour, SSL/TLS
Smooth Streaming	Yes
User/Host	Up to 32 users. 3 user levels: administrator, operator, and user
Security	Password protection, complicated password, HTTPS encryption, 802.1x authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2
Network Storage	MicroSD/SDHC/SDXC card (256 GB) local storage, NAS (NFS, SMB/CIFS), auto network replenishment (ANR), together with high-end Hikvision memory card, memory card encryption and health detection
Client	iVMS-4200, Hik-Connect, HikCentral
Web Browser	Plug-in required live view: IE8+ Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 11+ Local service: Chrome 41.0+, Firefox 30.0+



Specifications (continued)

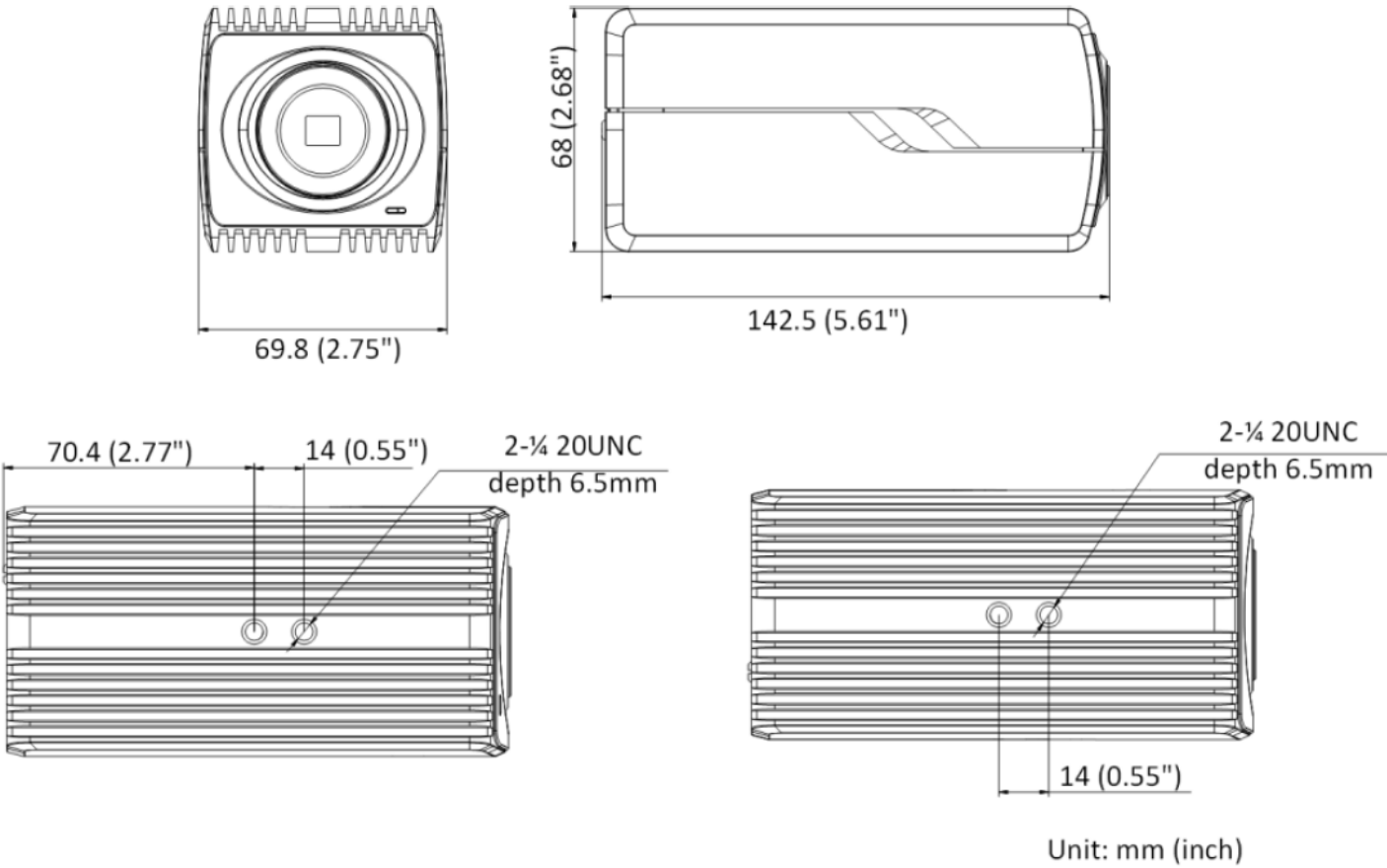
IDS-2CD7046G0-AP	
Image	
Smart IR	IR LEDs on camera should support Smart IR function to automatically adjust power to avoid image overexposure
Day/Night Switch	Day/Night/Auto/Schedule/Triggered by Alarm In
Target Cropping	Yes
Picture Overlay	Logo picture can be overlaid on video with 128 × 128 24-bit bmp format
Image Enhancement	BLC, HLC, 3D DNR, Defog, EIS, Distortion Correction
Image Parameters Switch	Yes
Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or Web browser
SNR	≥52 dB
Interface	
Alarm	2 inputs, 2 outputs (maximum 24 VDC, 1A)
Audio	1 input (line in), 1 output (line out), 3.5 mm connector, 2 channels, 1 built-in microphone
RS-485	1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Video Output	1 Vp-p Composite Output (75 Ω/CVBS) (for debugging only)
On-Board Storage	Built-in microSD/SDHC/SDXC slot, up to 256 GB
Hardware Reset	Yes
Communication Interface	1 RJ-45 100M/1000M self-adaptive Ethernet port
Power Output	12 VDC, maximum 200 mA (supported by all power supply types)
Smart Feature-Set	
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)
Smart Event	Line crossing detection, up to 4 lines configurable Intrusion detection, up to 4 regions configurable Region entrance detection, up to 4 regions configurable region exiting detection, up to 4 regions configurable, unattended baggage detection, up to 4 regions configurable object removal detection, up to 4 regions configurable, scene change detection, audio exception detection, defocus detection
Counting	Yes
Intelligent (Deep Learning Algorithm)	
Multi-Target Detection	Simultaneous detection of human body and face, gets 8 face features and 13 human body features
Attribute-based People Counting	Supports entering/exiting counting (track 30 targets simultaneously); identifies people who pass repeatedly over a period of time
Hard Hat Detection	Detects up to 30 human targets simultaneously; supports up to 4 shield regions
Queue Management	Detects queuing-up people number and waiting time of each person, Generates reports to compare the efficiency of different queuing-ups and display the changing status of one queue, raw data export for further analysis
Premier Protection	Line crossing, intrusion, region entrance, region exiting, alarm trigger by specified target types (human and vehicle), filter out mistaken alarm caused by target types such as leaf, light, animal, flag, etc.
General	
Linkage Method	Upload to FTP/NAS/memory card, notify surveillance center, send e-mail, trigger alarm output, trigger recording, trigger capture Trigger recording : memory card, network storage, pre-record and post-record Trigger captured pictures uploading: FTP, SFTP, HTTP, NAS, Email Trigger notification: HTTP, ISAPI, alarm output, Email
Online Upgrade	Yes
Dual Backup	Yes
Web Client Language	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
General Functions	Anti-flicker, 5 streams, up to 5 custom streams, EPTZ, heartbeat, mirror, privacy masks, flash log, password reset via e-mail, pixel counter
Software Reset	Yes
Sustainability	Yes
Storage Conditions	-30° to 60° C (-22° to 140° F), humidity 95% or less (non-condensing)
Startup and Operating Conditions	-30° to 60° C (-22° to 140° F), humidity 95% or less (non-condensing)
Power Supply	12 VDC ±24.9%, two-core terminal block, reverse polarity protection; 24 VAC ±24.9%; PoE: 802.3af, Type 1 Class 3
Power Consumption and Current	W/extra load: 12 VDC, 1A, 24 VAC, 0.79A, 50/60 Hz, 12 W; PoE (802.3af, 36-57 VDC), 0.34-0.21A, class 3
Power Interface	Two-core terminal block
Camera Material	Aluminum alloy body
Camera Dimension	142.5 mm × 69.8 mm × 68 mm (5.61" × 2.75" × 2.68")
Package Dimension	315 mm × 140 mm × 140 mm (12.4" × 5.51" × 5.51")
Camera Weight	730 g (1.96 lb)
With Package Weight	1115 g (2.99 lb)
Metadata	
Metadata	Intrusion detection, line crossing detection, region entrance detection, region exiting detection, unattended baggage detection, object removal, face capture and queue management are supported







Specifications (continued)

IDS-2CD7046G0-AP	
Approvals	
Class	Class B
EMC	FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 6, 2016); KC (KN 32: 2015, KN 35: 2015)
Safety	UL (UL 60950-1); CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013); CE-LVD (EN 60950-1:2005 + Am 1:2009 + Am 2:2013); BIS (IS 13252(Part 1):2010+A1:2013+A2:2015); LOA (IEC/EN 60950-1)
Environment	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)

Dimensions



Accessories

NOT INCLUDED				
				
WBS Wall Mounting Bracket	PP2 Pendent Mount	CHB Outdoor Housing	CHB-HBW Outdoor Housing with Heater, Blower, Wiper	CHB-HB Outdoor Housing with Heater and Blower